

CLAIM AMENDMENTS

1. (Currently Amended) A metal oxide semiconductor transistor comprising:
a semiconductor substrate having a device area;
a source area ~~formed~~ located in a ~~the~~ device area ~~of the semiconductor substrate~~;
a drain area ~~formed~~ located in the device area;
a gate layer ~~formed~~ located on and across the device area, between the source area and the drain area, and covering a gate area;
a control gate layer covering a control gate area and having a first part including a first end of the control gate layer and a second part including a second end of the control gate layer, the first part being ~~formed~~ located on the device area, between the gate layer and at least one of the source area and the drain area, ~~the first end being disposed so that there is~~ with a first gap between the first end and an edge of the device area; and
a diffusion area ~~formed~~ located in the device area, between the gate area and the control gate area.

2. (Currently Amended) The metal oxide semiconductor transistor according to claim 1, wherein the gate layer and the control gate layer are ~~formed on~~ located in a common plane.

3. (Original) The metal oxide semiconductor transistor according to claim 1, wherein the second part is disposed outside the device area.

4. (Currently Amended) The metal oxide semiconductor transistor according to claim 1, wherein

the second part is ~~formed~~ located on the device area, between the drain area and the gate layer, and

~~the second end is disposed so that~~ there is a second gap between the second end and ~~an~~ the edge of the device area.

5. (Currently Amended) The metal oxide semiconductor transistor according to claim 1, wherein

the gate layer has, outside the device area, a first contact area connected to ~~an~~ a first electrode,

the gate control layer has, outside the device area, a second contact area connected to ~~an~~ a second electrode, and

the first contact area and the second contact area are disposed ~~in one~~ on the same side of the device area.

6. (Currently Amended) The metal oxide semiconductor transistor according to claim 1, wherein

the gate layer has, outside the device area, a first contact area connected to ~~an~~ a first electrode,

the gate control layer has, outside the device area, a second contact area connected to ~~an~~ a second electrode, and

the first contact area is opposite to the second contact area with respect to the device area.

7. (Currently Amended) The metal oxide semiconductor transistor according to claim 1, wherein

the second part is ~~formed~~ located on the device area between the source area and the gate layer,

~~the second end is disposed so that~~ there is a second gap between the second end and the first end, and

the control gate layer has a third part connecting the first part and the second part, outside the device area.

8. (Currently Amended) The metal oxide semiconductor transistor according to claim 1, wherein the diffusion area ~~includes an impurity with~~ has the same conduction conductivity type as the source area and the drain area, and ~~has an impurity concentration lower than an~~ impurity concentration in the source area and the drain area.

9. (Currently Amended) A metal oxide semiconductor transistor comprising:

a semiconductor substrate having a device area;

a source area ~~formed~~ located in ~~a the~~ device area ~~of the semiconductor substrate~~;

a drain area ~~formed~~ located in the device area;

a gate layer ~~formed~~ located on and across the device area between the source area and the drain area; and

a control channel area ~~formed~~ located in the device area, between the gate layer and at least one of the source area and the drain area, the control channel area having a voltage threshold ~~value~~ that gradually changes in a longitudinal direction of the gate layer.

10. (Currently Amended) The metal oxide semiconductor transistor according to claim 9, further comprising a second control channel area ~~formed~~ located in the device area between the gate layer and at least one of the source area and the drain area, wherein the control channel area between the gate layer and at least one of the source area and the drain area has a voltage threshold ~~value~~ that gradually increases in the longitudinal direction, and the second channel area has a voltage threshold that gradually decreases in the longitudinal direction.

11. (Original) The metal oxide semiconductor transistor according to claim 9, wherein the control channel area includes a channel diffusion area that has an impurity concentration that gradually changes in the longitudinal direction.

12. (Currently Amended) The metal oxide semiconductor transistor according to claim 9, further comprising an insulating layer ~~formed~~ located on the control channel area, the insulating layer having a thickness that gradually changes in the longitudinal direction.